

Improvement Tools Fact Sheet

Value Stream Mapping

DOC Human Resources

VSM at a glance

Value Stream Mapping

Value Stream Mapping (VSM) is a Lean tool used to analyze and design the flow of materials and information required to bring a product or service to a customer.

Benefits

- Gives a big picture perspective
- Shows value added transformations
- Highlights sources of waste
- Makes information flows apparent
- Identifies constraints
- Forms a basis for an implementation plan

Parts of the VSM

- Customer & Supplier
- Input & Output
- Process steps
- Product/Information flow
- Queue time
- Metrics
- Notes
- Timeline

Tips for Building a VSM

- Start map from direct observation
- Use chart paper & sticky pads
- Place process boxes in the middle to allow for detail
- Include a legend
- Title & date

Definitions:

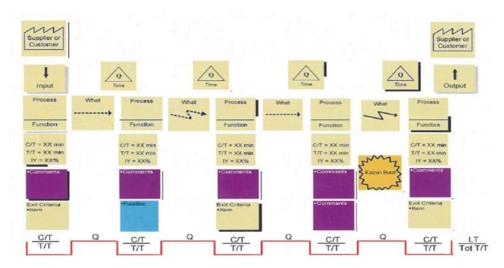
Value Stream – an entire set of activities needed to deliver a specific product to a customer

Value Stream Map – a visual tool which illustrates how materials and information moves through a value stream with a focus on improving the whole value stream rather than optimizing pieces of it

Value Stream Mapping is a two part process:

- 1) Current State Map describes the value stream in its current state
- 2) Future State Map describes the value stream after waste has been removed

Sample:



Steps to build a VSM

- 1. Identify customer & what is delivered
- 2. Identify supplier & what they provide
- 3. Confirm team's understanding of delivered product
- 4. Identify first process
- 5. Identify appropriate metrics for the process
- 6. Document comments & symbols
- 7. Identify "what" goes to next process & how the "what" is conveyed
- 8. Identify inventory or queues
- 9. Repeat steps 4-8
- 10. Validate current state map
- 11. Conduct value-added test on each step in value stream
- 12. Document overall value stream metrics in timeline

Remember: Value stream maps are used to analyze the system in order to identify and eliminate waste.

Reference:

Boeing Management Company, Lean+. (2010). Value Stream Mapping Workshop Leader Certification manual